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Entrepreneurship in the Periphery: Geography and Resources



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Entrepreneurship in the Periphery: Geography and Resources

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ABSTRACT

Entrepreneurship in the Periphery: Geography and Resources

This paper acknowledges that many peripheral regions are in a state of transformation due to globalization, shortened spatial, technological and even cognitive distances. Likewise, entrepreneurial activity in peripheral regions is in a state of transformation often benefiting from these changes. What is often thought to be a bastion of non-novel, imitative entrepreneurship, the periphery is showing signs of flourishing entrepreneurial activity that is at times quite creative. In some cases, if entrepreneurial action is not necessarily creative, it still holds benefits to the individual or community in question. To better understand entrepreneurship in the periphery, this paper places four different types of peripheries in a matrix comparing them to the structures of entrepreneurial resources (institutional, industrial, human capabilities, and socio-cultural). By doing this, the resource palette of a region can be examined as to its viability in sustaining desired forms of entrepreneurship. It can also isolate specific resource weaknesses before entrepreneurship development programs are carried out.

Keywords: entrepreneurship, periphery, human capabilities, institutions, regions

Entrepreneurship in the Periphery: Geography and Resources

The focus on the everydayness of entrepreneurship and the shift from a view of an elitist group of entrepreneurs towards a more encompassing, although anonymous, participation of all kind of citizens, has an inevitable political consequence, as it ultimately concerns the democratic process through which people can become integrated in the construction of society. If life as a daily creative formation is enacted through entrepreneurship, chances are created for and by people to make a difference toward their own situation. (Steyaert & Katz, 2004) p. 15

Entrepreneurship can then make a difference there where existing situations have stiffened, in all fields of a society where we feel involved and want to contribute. There is a saying that all the beauty of winter can be found in any single snowflake. Perhaps...we have the potential to find the beauty of entrepreneurship in almost any interaction we see. Indeed, the space of entrepreneurship in society is about nothing less than beauty.

(Steyaert & Katz, 2004) p. 17

I. Introduction

This paper views entrepreneurship from a spatial standpoint, specifically, from the perspective of the periphery. The periphery is often viewed as a challenging space for the entrepreneur because of the perception of a lack of resources in comparison to the core. This can be especially troubling since the entrepreneurial process often heavily depends upon local resources be they in the form of the tangible (financing) or intangible (social networks) variety. Resources are defined by the spaces they are in. Thus, it is important to understand *where* an entrepreneur is to judge *what* kind of entrepreneurship is possible.

This paper contributes to the field of regional economic development by placing resource factors found in industrial, institutional, human capability, and socio-cultural structures in a matrix with the four different types of peripheries isolated by Arzeni (Arzeni, Eposti, & Sotte, 2002). The resource structure in this matrix is taken from a resource framework developed in a previous paper (Fuduric, 2008). I first present how resources are impacted due to the changing characteristics of space. I then develop general ideas as to how entrepreneurial action is impacted by space and resources.

The paper is organized in the following manner. In the next section, the periphery is examined through definitions and characteristics. A commentary is given on the periphery in transformation due to globalization and increasing access to communication and information technology. In section III, a matrix is constructed comparing resources on a regional level to the different peripheral spaces delineated by Arzeni. I further develop ideas as to what kind of entrepreneurial action takes place in each of the settings. A word of caution: these are my first attempts at hypotheses development which are being documented in this paper to aid my empirical work.

II. WHAT IS THE PERIPHERY?

A. Definition and Characteristics¹

1. Definition

Historically, defining the periphery always seemed to need a comparison to the core and was often viewed as a place of underdevelopment. The following definition exemplifies this:

“Development of and access to knowledge, human capital, sophisticated communication networks and product technology is severely restricted by a division of labor that favors core over hinterland, wealthy over poor, politically strong over the weak, multinational firms versus local.”

Beck (1978)

Commentaries from other researchers follow the same vein. In economic literature, it is almost a given that firms in the periphery often provide low value products and services, remain small and have little hope for change (Whitely & England, 1990) and the obstacles to higher quality businesses (those generating economic growth and job creation) are venture capital equity gaps (Johnstone & Lionais, 2004), labor skill gaps (Davis & Hulett, 1999; Massey, 1995), lack of financial and business support institutions (Johnstone & Haddow, 2003) and a lack of institutional thickness (Amin & Thrift, 1994). While these characteristics are often true, the above definition and commentaries do not allow cognitive space for another perspective.

¹ For the purpose of this paper, the terms “periphery” and “rural” are interchangeable. This encompasses anything outside of urban centers or the core.

Instead of a value-laden description, Goodall equates the periphery with distance from the core but not only in the spatial sense as the quote below shows.

“Peripherality is the condition experienced by individuals, firms and regions at the edge of a communication system, where they are away from the core or controlling centre of the economy.”

Goodall (1987)

He introduces the notion of being at the edge of a “communication system”. This implies that if communication is enhanced then distance to the core may not be hindrance to economic action. This, in turn, makes peripherality a condition that is not immediately burdened with negative values. Goodall’s definition leaves room for finding economic and social potential in peripheries which is the starting point for the later examination of entrepreneurship in the periphery in this paper.

The terms periphery/rural have been used in different contexts from developed countries in Europe or the US, to the economically underdeveloped countries of Africa or Asia. In each of these contexts, rural areas have very different characteristics. The European Union acknowledges that rural areas are “complex economic, natural and cultural locations, which cannot be characterized by one dimensional criteria such as population density, agriculture or natural resources”(European Commission, 1999). The EU also makes very clear that interventions for development will “differ greatly” from each other (European Commission, 1999). A glimpse into this complexity was given by Arzeni, Esposti and Sotte (2002) who identified different rural areas in the EU with different developmental requirements. He broke down the rural areas into the following sets and I assigned the numbers P1-P4 for ease of description in later discussions:

- P1) those near urban centers
- P2) those that have natural, historical and leisure value
- P3) areas where agriculture is a dominant activity
- P4) remote, distant areas with much migration flow

Considering these four periphery typologies, it is clear that each peripheral form has a different historical legacy, different resources and problems, and different economic and social goals for the future. Goodall has provided us with the concept of a non-judgmental distance from “a controlling centre of an economy”

which allows intellectual room to think of peripheries differently. Arzeni has qualified that distance in asking how far the periphery is from the core. He acknowledges that not all peripheries are created equal in terms of distance, resources, and economic well-being. If all peripheries are not created equal, then by default of logic, the forms of entrepreneurship taking place in the different peripheries will also be different due to the different palette of resources dictated by distance. The periphery has assets that are separate and distinct than those in the core and herein could lay the periphery's economic salvation. It is in this potential where the discussion on entrepreneurship in the periphery will be based. But first, an exploration of the periphery's characteristics based on resource structures is needed in the next section.

2. Resource Structures in the Periphery

The goal of this section is to understand what structures from the standpoint of institutional, industrial, aggregate human capabilities, and socio-cultural factors could be present in the periphery categories of P1-P4. When speaking of the characteristics of the periphery there is a need to acknowledge that the periphery is not a static concept. The notions of distance and cognitive and physical mobility are changing. There are two major reasons that these notions are changing and at the same time changing peripheral regions. The first is globalization and the second reason is the increasing accessibility of information and communication technology (ICT).

Globalization's effects on the periphery can be positive and negative. One of the positive aspects of globalization is that it can offer the periphery linkages on the level of trade, financial and technology transfers (Lorentzen, 2007a). Peripheries ignored by their national or regional development programs have access to information, knowledge and markets that previously were unreachable. A negative effect of globalization is that increased competition makes it difficult to compete on a global level unless an innovation is in question. Thus, it is even more critical for a regional economy to specialize and develop competencies that cannot be easily copied by competitors (Lorentzen, 2007a). Strengthening the role of the region is done by supporting closer cooperation among regional actors, regional universities, industry

associations and technology transfer organizations as a platform for international competitiveness of the regional economy (Cooke, Uranga, & Extbarria, 1997). Strengthening the role of the region through this multi-actor, multi-institutional cooperation is an excellent idea. However, the region in question would have to have high levels of human and institutional resources to be able to take advantage of any cooperation on this level. Thus, an excellent cognitive starting point in evaluating peripheries is to begin in examining the structures that provide resources. The effects of ICT on the resource structures are considered below, thereafter, the structures will be examined.

If globalization's potential for peripheries is anchored in the concept of "expansion", then information and communication technology is the lubricant that brings this expansion in the form of markets, institutions, virtual social networks, information and knowledge within reach of the periphery's economic actors. The periphery can take advantage of resources previously available only in the core (Suarez-Villa & Cuadrado-Roura, 1993). This "regional inversion" started becoming apparent in the late 20th century which had the effect of taking some of the negative edge away from the periphery. The core also began losing some of its attractiveness due to quality of life reducing properties of population overgrowth, low environmental quality, and decaying infrastructures (Norton & Tenenbaum, 1992). As technology potential increases and becomes less expensive, we will continue to witness a shortening of distances thereby making the periphery less peripheral and expanding the palette of opportunities available to entrepreneurs.

What we are witnessing is a blurring of boundaries on many levels, not just the core and the periphery, but also the global and the periphery, and between different forms of peripheries. What was once a linear relationship between the core and periphery; is now a mosaic which has the characteristics of making many different "cores" available to one periphery. The result of these new relationships and distances is that new resources (financial, information, and human) have become available.

Resources becoming available and the actual use of them are two different actions. The ability to use resources unleashed by ICT and the ability to take advantage of global linkages is dependent upon the investment in local relational

and absorptive capabilities (Lorentzen, 2007b). I interpret local relational and absorptive capabilities to be the resources of a region or locality. Simply put, a region needs resources to take advantage of resources. The origins of these resources can be found in individual and environmental contexts. On a regional level, these resources come from institutional, industrial, human capability, and socio-cultural structures. The next subsections provide a literature review and discussion on the interplay between these structures and the periphery.

Institutional Characteristics:

Institutional characteristics have to do with aspects of social organization especially with the assembly of agents as parties to a common space. This space is formed by representations, models and rules which affect thought-processes as well as actions (Lorentzen, 2007b). Having healthy institutions is necessary to help actors cooperate in a meaningful way which is underlined by trust and the ability to have recourse if someone is not following the rules. The presence of robust institutions is characterized by the term “institutional thickness” (Amin & Thrift, 1994). These institutions have high levels of interaction among actors, define structures of domination, and serve as a rallying device to underline that the actors are undertaking a common enterprise (Amin & Thrift, 1994). The authors state that regions need local institution building if they are to compete in the global economy. I would add to their view by saying that depleted regions need robust institutions to have any economic meaning at all, whether competing in the global economy or even the local/regional.

When considering the effects of institutions on the regional or local economy it is important to keep in mind that institutional infrastructures are present on various spatial levels (Lorentzen, 2007b). An entrepreneur starting his own business is affected by micro-institutions of co-operation between actors, by regional/national education systems and policies, by industrial associations, by national policies, and by international knowledge exchanges (Lorentzen, 2007b).

A strong institutional presence can have some weaknesses for a periphery. The structure may be bureaucratic in nature not really serving the people it is supposed to. It could conflict with other institutions and their policies within or across levels and create barriers for new ways of thinking or action.

Industrial Characteristics:

In the following discussion on industrial characteristics, it makes sense to place them against the peripheries 1-4 to exemplify how industries are affected by geography. Having a diverse mixture of large and small firms strengthens the economic viability of a region. Large firms can be the source of many forms of learning for potential entrepreneurs, for example: having experience with R&D and technological development, providing industry, functional and general business experience (Fuduric, 2008). Having the opportunity to experience these opportunities offered by larger firms, employees are more likely to start their own businesses (Shane, 2003). The periphery type that has access to this resource base is P1 because of its physical proximity to the core. Being close to the core, high levels of skills and education can be sustained but also the proximity to power and knowledge structures eases economic action.

The P2 has the industrial characteristic of a service industry catering to tourists in all forms of guest services – hotels, B&B's, restaurants, cultural, relaxation and sports offerings. This periphery's economic potential is in offering experiences to the local, national and even international markets. Its competitive advantage from the core or any other periphery is that it offers natural beauty and traditions having cultural value often unique enough not to be found elsewhere.

The P3 is described as being agricultural. The agricultural environment can have two aspects. The first has large, industrialized highly efficient farms with a focus on national and international markets. The second has small farms usually focused on the local or regional market. The smaller, less high technology farms exhibit labor intensity, low profits, low productivity, intensive competition, and low wages. If a manufacturing facility exists in a P3 then this industrial environment often has standardized, large-batch, mature product life-cycle manufacturing. The retail environment is usually small-scale retail trade.

Due to large levels of migration flow, P4 loses its resources to more robust peripheries or to the core. This periphery is most depleted from a resource perspective. It is often characterized by forms of economic and social stagnation.

It is difficult to speak of industries in this environment because there are often none. Unemployment is high and any economic activity revolves around small farming or fishing, small retail establishments or small labor or craft based businesses.

Human Capabilities

Physical distance from the core has important implications for opportunity structures and experiences faced by individuals living in peripheries. Focusing on our P1-P4 gradations and leaving out the effects of ICT for the moment, it can be logically assumed that people will have lower levels of **education, diversity in work experience**, and little **access to new information or training** the further away they are from a core.

Formal education is the most used medium to gain individual access to career ladders and is most directly related to higher wage rates (Beck et al., 1978). In the periphery, occupational opportunity structures either through education, training, or job experience are more restricted with a consequent dampening of task and wage variations (Beck et al., 1978). Education levels are usually higher the shorter the distance to institutions of learning. If young people in the periphery manage to gain a higher education in the core, they usually choose to stay where opportunities for employment are plentiful in their chosen fields thus finding it difficult to return to the remoteness of peripheral regions.

In the core, workers move within job structures characterized by differentiated task and wage schedules with often well-defined career patterns (Doeringer & Piore, 1971) Diversity in work experience is available where jobs are plentiful, in a job market that is dynamic. The same can be said for access to information and training. Thus, citizens in more remote peripheries have less access to diverse job experiences and often have less choices available in designing career paths.

Considering the shrinking of distances due to the accessibility of ICT, education and training are no longer anchored by place. This new development makes information and knowledge that was once the domain of the core readily available to the periphery. Granted, sometimes face-to-face interactions are

necessary but as practice has shown through the proliferation of on-line degree programs, a large part can be virtual.

Socio-Cultural Characteristics

Socio-cultural characteristics in a community have a large influence on the level and type of economic activity taking place. These characteristics often have two effects; a positive repercussion and a potentially negative one. A detailed examination of entrepreneurship and socio-cultural characteristics is found in (Fuduric, 2008). This section will explore how social networks and social capital are embedded in the cultural context of the different peripheries.

Culture can be viewed in two ways - as aesthetic manifestations² or as tradition which manifests patterns of social interconnectedness. Tradition is defined by the American Heritage Dictionary as a “long established action or pattern of behavior in a community of a group of people, often one that has been handed down from generation to generation.” Patterns of behavior, traditions, are really informal institutions that set the rules of behavior. Traditions influence the culture of social interconnectedness in small communities and are often seen as having a positive influence on society and economics. People tend to trust and cooperate more readily and are more likely to enter informal contracts, reducing the costs of doing business (Smelser & Swedborg, 1994). Culture in the form of tradition can be a large source of the periphery’s asset base which provides a social anchoring in the community and a social network in which to economically excel (Norton & Tenenbaum, 1992).

There is a marked difference in the way that social structures, networks and personal ties are used in the periphery and the core (Benneworth, 2003). Rural areas depend more on informal learning processes through their social network than do their core counterparts (Benneworth, 2003). Social networks in rural settings often have more strong ties than weak (Benneworth, 2004). The opposite is true for people living in urban settings (Morris, Woodworth, & Hiatt, 2006). If Granovetter’s (1985) seminal research finds that more opportunities are created through weak ties and inhabitants of peripheries have more strong ties, then the logical outcome is that people in the periphery have fewer opportunities at their disposal. Why is this?

² The higher aesthetic aspects of culture include art in all of its forms which are also core focused- museums, theaters, galleries, concert halls, publishing

Dynamic social networks secure the influx of new ideas, information and knowledge through what Burt called structural holes (Burt, 2002). Structural holes are linkages in social networks which give economic actors access to other networks which otherwise would not be possible. I hypothesize that the more distant a periphery is from a core, the less likely it will be that the social networks are large, diverse and have structural holes. This makes it more difficult for citizens of a remote periphery to have access to different types of information and experiences than what is readily available through their own network.

As supportive strong networks can be for the citizens' social and emotional lives, this can lead to an "over-embeddedness" as described by Burt (1992). Over-embeddedness has a crowding out effect. It can crowd out new influences in the form of information, training, technological development and even new entrants. These new entrants, called "in-migrants" often import different experiences and actions. They enhance the social and hence, the economic diversity of a peripheral region.

Summary of the Periphery

The aim of the previous section was to first anchor the discussion of the periphery by defining it and acknowledging that peripheries differ depending on their physical distance to the core. The increasing effects of globalization and the accessibility of ICT are changing our perceptions and experiences of distance. Information and communication technology is releasing a host of new resources to the periphery that was previously only found in the core. Thus, there is the potential of economic action tapping into a global and national level, not only the local. The second aim of this section was to isolate the structures (industrial, institutional, aggregate individual capabilities, socio-cultural) relevant to the resource base in a periphery.

In the next section, the structures will be applied to the different types of periphery in a matrix. The matrix acts as a guideline in depicting how different forms of entrepreneurship arise when different peripheries are compared against different resource structures. There are two things the matrix in Table 1 can hypothetically tell us. First, are there environmental/institutional resources present on the local level to

engender desired forms of entrepreneurship? Second, do the citizens of the periphery in question have the skills, training, and/or education to take advantage of these resources? Thus, regional resources, geography and entrepreneurship come together to give insight into the third and fourth questions: What kind of entrepreneurship can be manifested based on the resources available? Do the emerging entrepreneurial actions provide benefits to the community?

III. ENTREPRENEURSHIP and THE RESOURCE MATRIX FOR PERIPHERIES

It is exemplified in the previous section that not all peripheries are created equal. In the same vein, not all forms of entrepreneurship are created equal. They are not alike in their forms or in their returns to society. The forms and effects of entrepreneurship are influenced by resources: human and environmental/institutional. The entrepreneur uses resources to create products or services of a higher value. As a result, the entrepreneur's community receives the benefits of an increased dynamic of economic action. Thus the notion of resources in an entrepreneurial sense is recursive and very much affected by the spatial. Using the P1-P4 descriptions of the periphery and placing them in a matrix against the resource structures presented in the previous section, I begin to develop some ideas as to what forms of entrepreneurship are possible. These are only preliminary ideas without empirical research to support them but useful nonetheless to understand why and where different forms of entrepreneurship could take place. Table 1 brings these variables together in the form of a matrix.

Table 1: The Resource Matrix for Peripheries

Code	Periphery Description	Industrial Structure	Institutional Structure	Aggregate Individual Capabilities	Socio-Cultural Structure
P1	Near urban setting	High-tech mfg; high level services; easier access to urban market	Thick Wage rate ↑ Income disparity ↓ Capital availability ↑	Education ↑ Diversity of Experience ↑ Access to info. & knowledge ↑	Social capital → Tradition ↓
P2	Historical and/or Natural and/or Traditional Value	Concentration on tourism services	Med. Thick Wage rate → Income disparity → Capital availability →	Education → Diversity of Experience ↑ Access to info. & knowledge →	Social capital ↑ Tradition ↑
P3	Agricultural	High-tech industrial farming or small farms, mass mfg.	Med. Thin Wage rate ↓ Income disparity ↑ Capital availability →	Education ↓ Diversity of Experience ↓ Access to info. & knowledge →	Social capital (depends) Tradition →
P4	Remote	Subsistence farming, small retail	Thin or non-existent Wage rate ↓ Income disparity ↑ Capital availability ↓	Education ↓ Diversity of Experience ↓ Access to info. & knowledge ↓	Social capital (depends) Tradition ↑

The goal in developing the above matrix is to compare the **resources** (industrial, institutional, human capabilities, and socio-cultural) an entrepreneur has at his disposal to the **space** (P1-P4) where he is engaging in entrepreneurial action. In the following sections, I hypothesize as to the nature of entrepreneurship in the varied peripheries and consider how entrepreneurship is enabled or disabled considering

where it is enacted. The next subsections explore entrepreneurial action first in the P1 and P2, then in the P3 and P4.

1. Entrepreneurship in P1 and P2.

The periphery closer to the core (P1) and the periphery with a historical and/or cultural attraction (P2) have a broader resource palette than P3 and P4. P1 is close enough to the core for entrepreneurs to take advantage of an industrial structure where there is a larger market at the entrepreneur's disposal including a diversity of economic action. P1 also has the benefit of being able to tap into the core's institutional environment to take advantage of education/training systems and have easier access to financial institutions to secure capital. The ability to participate in a higher wage rate is present because wages are higher in the core, hence, experiencing a lower income disparity with the core. Levels of education will be higher because educational institutions are more accessible. Career and personal experiences will be more diverse due to the diversity of jobs and people concentrating in the core, which naturally leads to more availability of information and knowledge. The lower levels of social capital and tradition give the entrepreneur more access to other networks while tradition is not acting as a barrier to risk-taking or exploring the new.

P2 functions with a different resource palette than P1. Here the entrepreneurial emphasis is not on production, high level professional services or high technology but more on the experiences that can be consumed and the services tied to these experiences. P2 capitalizes on what is found in Table 1 as high levels of social capital and tradition. The benefits of high levels of social capital are that they can lower transaction costs as well as minimize risk. In a P2 setting, entrepreneurs can transfer what has conventionally been viewed as peripheral weakness – tradition, underdevelopment - into core business assets (Benneworth, 2004).

The P2 functions as the curator of rural tradition and/or as the steward to environmental well-being. In this special position, there is a clear competitive advantage in relation to the core. From the standpoint of selling this image of tradition and natural beauty, the periphery is freed from depending on local markets but could also have access to national customers as well as international ones. The

entrepreneurial opportunity is to commoditize and market products and/or services that reflect a specific locally anchored craftsmanship, tradition, and/or impart a sense of culture. The more affluent some societies become the more they move toward “experiential consumption” rather than material forms of consumption (Anderson, 2000; Lorentzen, Hansen, & Lassen, 2007). This experiential consumption carried out by the post-modern consumer is focused on fulfilling higher level needs; establishing connectedness, finding personal meaning and quality of life enhancements (Anderson, 2000).

From an institutional perspective, the competitive, or economic, advantage of having tradition and natural beauty as commodities offers the P2 more accessibility to institutions offering financial resources than in the P3 or P4. Income disparity in comparison to the core, may be higher than in P1 because of the generally lower level of earnings through tourism or services than, for example, higher technology industries in the core.

2. Entrepreneurship in P3 and P4

Some industries found in the P3 include agricultural activity, low technology production, and small scale retail. P4 industrial characteristics include subsistence farming or fishing and small scale retail. These peripheries are devoid of the industrial conditions mentioned in the discourse on P1 and P2 which encourage new venture start-ups: the presence of large firms, a diversity of firms, a unique cultural/natural offering. The cost of inputs in more remote regions is often higher than in the core due to larger distances and weaker infrastructure. This in turn affects the profitability of a new venture if they are paying more to receive their inputs and to send their outputs to market. Thus, entrepreneurial activity in these peripheries can be a challenge due to institutional thinness and low population density which affects everything from education levels to access to information and knowledge.

Low population density has a variety of effects on the periphery. First, it accentuates the problem of low demand if the customer base is mainly indigenous. This lack of economic scale results in higher prices which are often beyond the reach of the local community's purchasing power. Small stores in the retail or local services sector are unable to offer competitive prices being more vulnerable to the low prices offered by

large discount stores. Low demand makes it more difficult to find resources and services that are commonplace in the core, they include: regular postal service, high speed internet access, specialist technical advice, suitable office or factory space. There are fewer lending institutions which in turn limit access to capital or at the very least make borrowing very expensive.

Second, low population densities tend to affect the human capital levels in an area. Many rural workforces suffer from low skill levels, a lack of skill diversity, a shortage of professionals and a structural mismatch between available jobs and people. Due to low population levels, institutions of learning are far away. The young have to leave to be educated and once when well-educated, they tend to stay away. If the educated stay away then the result, unfortunately for P3 and P4, is a lower quality of entrepreneurship.

Third, from a social networking standpoint, peripheral entrepreneurs are less likely to encounter peers with whom they share ideas and problems. The absence of emotional support and information from social networks limits the level of new firm creation and business success (Shane, 2003). Entrepreneurial success and the transferal of entrepreneurial benefits to the community are very sensitive to the social context. One of the most glaring weaknesses of P3 and P4 is that intangible assets necessary to support a robust entrepreneurial environment are weak or missing. Venkataraman (2004) states that intangible assets are just as important as tangible assets in supporting entrepreneurship. Even though Venkataraman focuses on technological entrepreneurship, his hypothesis can be applicable toward the flourishing of any form of entrepreneurship. Some of the socially embedded intangible assets important for entrepreneurial growth he isolated are: access to novel ideas, access to role models, the presence of informal forums, region specific opportunities, and the presence of executive leadership (Venkataraman, 2004). If a lack of cognitive and physical mobility exists, it would keep a periphery isolated from new ideas, new trends, new information, and role models.

Entrepreneurs rely on internal linkages that encourage the flow of goods, services and information, and ideas. The intensity of family and personal relationships in rural communities can be helpful in gaining limited information and lowering transaction

costs but also may present obstacles to effective business relationships. For example, business opportunities could receive less rigorous objectivity because of the personal relationship involved or rivalries may keep people from cooperating.

The entrepreneur's viability is dependent on the flow of information and new innovations from his environment. This is limited if there are few or no links to the world outside of a social network (Burt, 1992) Entrepreneurs who have access to alternative ways of thinking and behaving have more options of action. Those that do not, quickly become "ossified and out of step with the demands of...the environment, ultimately leading to decline" (Uzzi, 1997).

From an infrastructure, communication and information technology standpoint, low population density means only one thing; that these areas will be the last beneficiaries from any investments in modernization. The building of new roads and new communication connections often begin in the core. However, if P3 and P4 are the benefactors of upgraded infrastructure and ICT, then the negative aspects of physical distance are minimized which could allow more information, knowledge, financial resources, virtual social networks to enter the P3/P4 entrepreneur's sphere of influence.

Ventures in P3 and P4 may not contribute much to national economic growth or employment (GEM, 2006) but Friedman (1987) and Dabson (2001) stress that in rural and distressed areas these distinctions may not be so relevant because any small business activity is worthwhile. Because rural regions have great difficulty in attracting outside investment, local entrepreneurial activity may be the only economic activity taking place. It may even be a last chance for sustaining economic meaning in a community. The reason economic stagnation occurs in these peripheries is that a low population density affects the strength of industrial, institutional, human capability and socio-cultural factors.

The previous subsections have shown that different peripheries engender different forms of entrepreneurship due to their specific resource sets. The aim was to consider how the factors in the industrial, institutional, human capability and socio-cultural structures would affect entrepreneurial action in P1 through P4. This mix of

geography, resources, and entrepreneurial action acknowledges the complexity of using entrepreneurship as a development tool in peripheries. Simply put, the strength of the resource base of a periphery will determine the form of entrepreneurship taking place which in turn will determine the societal benefits of entrepreneurial action.

VII. CONCLUSION

The aim of this paper was to introduce geography, in the form of the periphery, as a determinant of different types of entrepreneurship. By introducing the variable of geography, a basis for understanding resource structures was created. The periphery is characterized using Arzeni's (2002) four types which are based on distance from the core. Using these four typologies, the periphery is removed from the value-laden view of a depleted, resource-poor place and can be considered as a place of entrepreneurial potential. The field of regional development has never had a tool to assess (the forms of) entrepreneurship based on different geographies and their different resources. This paper represents a point of departure from previous research by presenting a matrix which does exactly that. It is meant to be a starting point for the development of theory and should be expanded. I am presenting an "ideal" starting position for understanding the forms of entrepreneurship and its relationship to resources and geography. However, I have to acknowledge that reality is much more complex because of the intertwining interactions between industrial, institutional, human capabilities and socio-cultural factors which, in the matrix, were introduced as well-springs of resources.

Entrepreneurs are natural scanners of the environment where their activities mine resources that are unique to the periphery in question and by definition, see opportunities where others do not. Hence, they have an important role to play in any economic and social change. They are able to "commodify" the values emerging from the periphery and shift these values from an existing-use value to a new, higher market value (Julien, 2007). Johannisson et. al. (2002) sum up this phenomenon quite well when they wrote that, "Entrepreneurs combine socioeconomic vision and concrete action." The social and the economic are inextricable when considering

development of the periphery. Hence, the entrepreneur is perfectly poised to create change in this environment.

Creating positive economic and social change is a compelling promise of entrepreneurship. However, entrepreneurship can only be as robust as the environment it is enacted in. As the matrix in Table 1 shows, an economically enhancing entrepreneurship has a far greater chance at success in P1 than in P4 due to the proximity of resources. The matrix also points to the fact that it sometimes makes more sense to develop local resources in P4 than introduce entrepreneurship development programs. The true entrepreneur will know what to do if resources and opportunities are seeded in his environment. Thus, the aim of the matrix was to aid in hypothesis development generally defining what forms of entrepreneurship can be enacted using industrial, institutional, human capability, socio-cultural resources as parameters or boundaries dictated by each type of periphery.

Globalization and information/communication technology are widening the boundaries of the periphery allowing them to tap into national and global resource bases. Because of the increasing accessibility of ICT, the economic balance of peripheries can change for the better if human capabilities are on a high enough level to take advantage of this. This has a resource-enhancing effect because by shortening physical and cognitive distances, the entrepreneur has a new palette of resources from which to choose. As was pointed out in the paper, recognizing resources and knowing what to do with them are two different actions. Thus, it appears that all economic and social improvements have to begin with the development of the individual and of the formal and informal institutional environment. After all, it is the individual who recognizes, creates, and exploits opportunities and it is the institutional environment that either aids economic action or creates barriers against it.

BIBLIOGRAPHY

- Amin, A., & Thrift, N. (1994). *Living in the Global* Oxford: Oxford University Press.
- Anderson, A. R. (2000). Paradox in the periphery: an entrepreneurial reconstruction? *Entrepreneurship & Regional Development*, 12, 91-109.
- Arzeni, A., Eposti, R., & Sotte, F. (2002). *European Policy Experiences with Rural Development*. Kiel: European Association of Agricultural Economics.
- Beck, E. M., Horan, P. M., & Tolbert, C. M. I. (1978). Stratification in a dual economy: A sectoral model of earnings determination. *American Sociological Review*, 43, 704-720.
- Benneworth, P. (2003). *The micro-dynamics of learning networks: how local actors contest "peripherality"*. Paper presented at the Reinventing regions in the global economy.
- Benneworth, P. (2004). In what sense 'regional development?': Entrepreneurship, underdevelopment and strong tradition in the periphery. *Entrepreneurship & Regional Development*, 16, 439-458.
- Burt, R. S. (1992). *Structural Holes*. Cambridge, MA: Harvard University Press.
- Burt, R. S. (2002). *The Social Capital of Structural Holes*. New York: Russell Sage Foundation.
- Cooke, P., Uranga, M., & Extbarria, G. (1997). Regional Innovation Systems: Institutions and organisational dimensions. *Research Policy*, 26, 475-491.
- Dabson, B. (2001). Supporting Rural Entrepreneurship. *White Paper*.
- Davis, C., & Hulett, L. (1999). *Skills Needs in Resource-based Sectors in Atlantic Canada*. Paper presented at the Skills Development in the Knowledge-based Economy.
- Doeringer, P., & Piore, M. J. (1971). *Internal Labor Markets and Manpower Analysis*. Lexington, MA: Lexington Books.
- European Commission. (1999).
- Friedman, D. (1987). *Evolutionary Economic Games*: University of California Southern California.
- Fuduric, N. (2008). The Sources of Entrepreneurial Opportunities. Aalborg University.
- GEM. (2006). *Summary Results*.
- Goodall, B. (1987). *The Dictionary of Human Geography*. London: Penguin.
- Granovetter, M. (1985). Economic action, social structures and embeddedness. *American Journal of Sociology*, 91, 481-510.
- Johannisson, B., Ramirez-Pasillas, M., & Karlsson, G. (2002). The institutional embeddedness of local inter-firm networks: a leverage for business creation. *Entrepreneurship & Regional Development*, 14, 297-315.

- Johnstone, H., & Haddow, R. (2003). *Industrial Decline and high technology renewal in Cape Breton: Exploring the limits of the possible*. Kingston, Quebec: McGill-Queen's University Press.
- Johnstone, H., & Lionais, D. (2004). Depleted communities and community business entrepreneurship: revaluing space through place. *Entrepreneurship & Regional Development*, 16, 217-233.
- Julien, P.-A. (2007). *A Theory of Local Entrepreneurship in the Knowledge Economy*. Cheltenham, UK: Edward Elgar.
- Lorentzen, A. (2007a). Knowledge Networks in Local and Global Space. *Forthcoming - Entrepreneurship & Regional Development*.
- Lorentzen, A. (2007b). *The Spatial Dimension of Innovation: Embedding proximity in socio-economic space*. Paper presented at the European Network for Industrial Policy.
- Lorentzen, A., Hansen, C. J., & Lassen, C. (2007). *Small cities in the experience economy: An evolutionary approach*. Paper presented at the Regions in Focus.
- Massey, D. (1995). *Spatial Divisions of Labour: Social Structures and the Geography of Production*. London: MacMillan.
- Morris, S. S., Woodworth, W. P., & Hiatt, S. R. (2006). The Value of Networks in Enterprise Development: Case Studies in Eastern Europe and Southeast Asia. *Journal of Developmental Entrepreneurship*, 11(4), 345-356.
- Norton, E., & Tenenbaum, B. H. (1992). Factors affecting the structure of US venture capital deals. *Journal of Small Business Management*.
- Shane, S. (2003). *A General Theory of Entrepreneurship*. Cheltenham: Edward Elgar.
- Smelser, N., & Swedborg, R. (1994). The Sociological Perspective on the Economy. In N. Smelser & R. Swedborg (Eds.), *The Handbook of Economic Sociology* (pp. 3-25). Princeton, NJ, US: Princeton University Press.
- Steyaert, C., & Katz, J. (2004). Reclaiming the space of entrepreneurship in society: geographical, discursive and social dimensions. *Entrepreneurship & Regional Development*, 16, 179-196.
- Suarez-Villa, L., & Cuadrado-Roura, J. R. (1993). Regional Economic Integration and the Evolution of Disparity. *Journal of the RSAI*, 72(4), 369-387.
- Uzzi, B. (1997). Social structure and competition in inter-firm networks: The paradox of embeddedness. *Administration Science Quarterly*, 42, 35-67.
- Venkataraman, S. (2004). Regional transformation through technological entrepreneurship. *Journal of Business Venturing*, 19, 153-167.
- Whitely, W. T., & England, G. W. (1990). *Cross National Meanings of Work*. Lexington, MA: Lexington Books.